

LEHIGH IN COSTA RICA

December 26, 20110 – January 14, 2012

ES-122 Sustainable Development

The Costa Rican Experience (3 credits of social science).

This course investigates the concept of sustainable development as it is currently being practiced in Costa Rica. The course is an examination of sustainable development and its implementation in Costa Rica. Students investigate sustainable agriculture and energy, ecotourism, land use planning and management, and the issue of biodiversity vs. resource exploitation in forests. Students also learn about Costa Rica, its social fabric, history, government, and culture.

Students and faculty will spend 18 days in Costa Rica during the winter break. The primary focus of the course will be case studies of specific sustainable development projects using a multidisciplinary approach. Students will visit the projects and learn about the goals and objectives, successes and failures of each. Various government and non-government agency representatives as well as local farmers and business people will provide descriptions and lectures related to these projects.

The class is divided into small multidisciplinary teams of students each focusing on a particular facet of sustainable development. Students will write a report, which will include a broad view of that facet of sustainable development, how it affects the local, regional, and national economy. The paper should show an understanding of the legal and financial instruments created by the Costa Rican government that enables that facet of sustainable development to take place. Students will also produce a written journal that includes some daily perspectives on sustainable development.

In addition to visiting and learning about specific sustainable development projects, students visit various cultural sites, including museums, and natural history sites such as volcanoes and rain forests.

COURSE OBJECTIVE

- Investigate the philosophy of and approaches to sustainable development.
- Learn about Costa Rican political, economic, and social institutions, which influence conservation and sustainable development policies.
- Learn the challenges associated with economic and social development in Latin America.
- Learn about the unique attributes of tropical rain forests and understand the ways in which rain forests have been exploited.
- Provide students with experience working in multidisciplinary teams to analyze and interpret information and solve problems.
- Provide ample opportunity for students to write and speak.
- Expose students to the richness of Costa Rican culture and natural history.

Possible Course Activities:

- Lectures on various aspects of conservation, natural resource management, and sustainable development by government and NGO officials (e.g. Sistema Nacional de Areas de Conservacion, Ministrerio de Planification Nacional y Politica economica, INBio, FUNDECOR, etc).
- Tours (and related lectures) of sustainable development projects which will form the basis for student group projects.
- Tours of traditional and modern agribusiness operations (i.e. coffee, banana, etc).
- Tours of renewable energy projects (hydroelectric, wind, geothermal, etc).
- Field trips and lectures at La Selva Biological Station (rainforest ecology), Palo Verde Biological Station (dry forest ecology), San Luis Biological Station (cloud forest ecology), Cabo Blanco Absolute Reserve (dry forest and Pacific tide pool ecology), Tortuguero National Park (Caribbean conservation area for nesting sea turtles), and the Osa Peninsula (global diversity “hot spot”)
- Visits to museums of art, culture, history, and natural history.
- River trips and eco-tourist activities.

ES-122 FACULTY

Professor Steven Cutcliffe, Department of History, Email: shc0@lehigh.edu

Professor Donald Morris, Earth and Environmental Science, Email: dpm2@lehigh.edu

Professor Richard Weisman, Civil and Environmental Engineering Email: rnw1@lehigh.edu

Professor Cutcliffe is a faculty member in history and directs Lehigh’s Science, Technology and Society Program. *Professor Morris* is a faculty member in Lehigh’s department of Earth and Environmental Science and has lived and conducted research in the tropical moist forests of Venezuela for 2 years. Professor Morris has also conducted research in the lake district of Argentina. *Professor Weisman* is a faculty member in Lehigh’s department of Civil and Environmental Engineering and has an expertise in water resource development and has worked and traveled in Costa Rica, Honduras, and Panama. Together they will lead students through a multidisciplinary investigation of sustainable development in Costa Rica.

Pre-requisites and Requirements

No pre-requisite other than sophomore or higher standing. We are attempting to attract students with diverse backgrounds from all 3 of Lehigh’s colleges. Spanish is **NOT** required, but if you do speak Spanish you will have ample opportunity to sharpen your skills.

All participants are **REQUIRED** to attend the 6 class meetings listed below during the fall semester of 2011. These class meetings will provide an important foundation prior to our arrival in Costa Rica. These meetings will include:

1. Discussions of assigned readings;
2. Investigation and discussion of relevant websites and other resource materials;
3. Background information and discussion of project subjects;
4. Preparation for travel to Costa Rica.

All participants are REQUIRED to attend 6 class meetings during the fall semester of 2011.

Tuesday, October 4th at 5 p.m.

Tuesday, October 18th from 7 p.m. - 9 p.m.

Tuesday, October 25th from 7 p.m. - 9 p.m.

Tuesday, November 1st from 7 p.m. - 9 p.m.

Tuesday, November 8th from 7 p.m. - 9 p.m.

Tuesday, December 6th at 5 p.m.

LOCATION: TBA

These class meetings will provide an important foundation prior to our arrival in Costa Rica.